

```
1 #include "Player.h"
2 #include "Key.h" // using key in a function
3 #include <iostream>
4
5 using namespace std;
6
7 constexpr int kStartNumberOfLives = 1;
8
9 Player::Player()
10     : PlaceableActor(0,0)
11     , m_pCurrentKey(nullptr)
12     , m_money(0)
13     , m_lives(kStartNumberOfLives)
14 {
15 };
16
17 bool Player::HasKey()
18 {
19     return m_pCurrentKey != nullptr;
20 }
21
22 bool Player::HasKey(ActorColour colour)
23 {
24     return HasKey() && m_pCurrentKey->GetColour() == colour;
25 }
26
27 void Player::PickUpKey(Key* key)
28 {
29     m_pCurrentKey = key;
30 }
31
32 void Player::UseKey()
33 {
34     m_pCurrentKey->Remove();
35     m_pCurrentKey = nullptr;
36 }
37
38 void Player::DropKey()
39 {
40     if (m_pCurrentKey)
41     {
42         m_pCurrentKey->Place(m_pPosition->x, m_pPosition->y);
43         m_pCurrentKey = nullptr;
44     }
45 }
46
47 void Player::Draw()
48 {
49     cout << "@";
50 }
```